

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Please cancel claims 1-22 without prejudice in favor of the following new claims:

23. (New) A process for producing a recombinant fibrinogen producing cell which highly produces fibrinogen, comprising incorporating, into an animal cell, genes encoding an α chain (and/or variant of α chain), a β chain and a γ chain (and/or variant of γ chain) which are polypeptides constituting fibrinogen so that the number of a γ chain (and/or variant of γ chain) gene is 1- to 1000-fold amount of a total number of an α chain (and/or variant of α chain) gene and a β chain gene.

24. (New) The process according to claim 23, wherein the number of a γ chain gene is the same as a total number of an α chain gene and a β chain gene.

25. (New) The process according to claim 23 or 24, wherein a vector having a gene encoding an α chain and a γ

chain, and an expression vector having a gene encoding a β chain and a γ chain are used by mixing them.

26. (New) The process according to claim 25, wherein a vector having a gene encoding an α chain and a gene encoding a γ chain, and an expression vector having a gene encoding a β chain and a gene encoding a γ chain are used by mixing them at an equal amount.

27. (New) The process according to claim 23, wherein expression vectors pCAGGD-GB and pCAGGDN5-GA described in Fig. 1 are mixed at an equal amount, and this is incorporated into an animal cell.

28. (New) The process according to claim 23 or 24, wherein a vector having a gene encoding an α chain and a β chain, and an expression vector having a gene encoding a γ chain are used by mixing them.

29. (New) The process according to claim 23 or 24, wherein an expression vector having a gene encoding an α chain, an expression vector having a gene encoding a β chain and an expression vector having a gene encoding a γ chain are used by mixing them.

30. (New) The process according to claim 23,
wherein an expression vector having a promoter selected from
the group consisting of a SV40 early promoter, a SV40 late
promoter, a cytomegalovirus promoter and a chicken β -actin
promoter, and a marker gene for gene amplification selected
from the group consisting of an aminoglycoside 3'
phosphotransferase (neo) gene, a puromycin resistance gene, a
dihydrofolate reductase (dhfr) gene and a glutamine synthetase
(GS) gene is used.

31. (New) The process according to claim 30,
wherein an expression vector having a chicken β -actin promoter
and a dihydrofolate reductase gene is used.

32. (New) The process according to claim 23,
wherein as a gene encoding an α chain, one or both of a gene
encoding a α chain and a gene encoding an αE chain which is a
variant thereof are incorporated.

33. (New) The process according to claim 23,
wherein as a gene encoding a γ chain, one or both of a gene
encoding a γ chain and a gene encoding a γ' chain which is a
variant thereof are incorporated.

43. (New) Fibrinogen produced by using a process as defined in any one of claims 39 to 41.

34. (New) The process according to claim 23,
wherein as a gene encoding a γ chain, one or both of a gene
encoding a γ chain and a gene encoding a γ' chain which is a
variant thereof are incorporated and, as a gene encoding an α
chain, one or both of a gene encoding an α chain and a gene
encoding an αE chain which is a variant thereof are
incorporated.

35. (New) The process according to claim 23,
wherein the animal cell is selected from the group consisting
of a Chinese hamster ovary cell (CHO cell), a mouse myeloma
cell, a BHK cell, a 293 cell and a COS cell.

36. (New) The process according to claim 35,
wherein the Chinese hamster ovary cell (CHO cell) is a DG44
strain.

37. (New) A process for producing a recombinant
fibrinogen producing cell which highly produces fibrinogen,
comprising incorporating, into an animal cell, a baculovirus
P35 gene at the same time with or at a different time from
genes encoding polypeptides constituting fibrinogen, in
addition to the process for producing a recombinant fibrinogen
highly producing cell as defined in claim 23.

38. (New) A recombinant fibrinogen highly producing cell obtained by a process as defined in claim 23.

39. (New) A process for producing a large amount of fibrinogen, comprising culturing a recombinant animal cell obtained by the process as defined in claim 37 by a culturing method at condition under which apoptosis is not induced.

40. (New) A process for producing a large amount of fibrinogen, comprising culturing by any of a fed batch culturing method, a perfusion culturing method, and a culturing method using a nutrient enriched medium in a process for producing a large amount of fibrinogen using a recombinant animal cell as defined in claim 38.

41. (New) A process for producing a large amount of fibrinogen, comprising using a serum-free medium in a process for producing a large amount of fibrinogen using a recombinant animal cell as defined in claim 38.

42. (New) Fibrinogen produced by using a recombinant fibrinogen highly producing cell as defined in claim 38.